J. Paleont., 74(6), 2000, pp. 1199–1207
Copyright © 2000, The Paleontological Society
0022-3360/00/0074-1199$03.00

JOURNAL OF PALEONTOLOGY
INDEX OF VOLUME 74

AUTHOR INDEX

ADACHI, SHUKO, see *70*
1. ALBANESI, GUILLERMO L. AND CHRISTOPHER R. BARNES
   Subspeciation within a punctuated equilibrium evolutionary event: phylogenetic history of the Lower-Middle Ordovician *Paroistodus originalis-P. horridus* complex (Conodonta), p. 492
ALDRIDGE, RICHARD J., see *65*
2. ALONSO, JESUS, ANTONIO ARILLO, EDUARDO BARRÓN, J. CARMELO CORRAL, JOAN GRIMALT, JORDI F. LÓPEZ, RAFAEL LÓPEZ, XAVIER MARTÍNEZ-DELCLÒS, VICENTE ORTUÑO, ENRIQUE PEÑALVER, AND PAULO R. TRINCÃO
   A new fossil resin with biological inclusions in Lower Cretaceous deposits from Álava (northern Spain, Basque-Cantabrian Basin), p. 158
ALVAREZ-SIERRA, M. A., see *62*
APPLEGATE, SHELTON P., see *77*
ARCHER, MICHAEL, see *15*
ARILLO, ANTONIO, see *2*
3. ASH, SIDNEY
   Evidence of oribatid mite herbivory in the stem of a Late Triassic tree fern from Arizona, p. 1065
4. AUSICH, WILLIAM I., ALAN GOLDSTEIN, AND RON YATES
   Crinoids from the Muldraugh member of the Borden Formation in north-central Kentucky (Echinodermata, Lower Mississippian), p. 1072
AUSICH, WILLIAM I., see *4, 10, 21*
5. BAESEMANN, JOHN AND MARK PURNELL
   Ubinates, a new name for the genus *Aethotaxis* Baesemann, 1973 (Vertebrata, Conodonta) preoccupied by *Aethotaxis* Dewitt, 1962 (Vertebrata, Osteichtyes), p. 544
6. BALINSKI, ANDRZEJ, SUN YUANLIN AND A. J. BOUCOT
   Heterochrony in *Stringocephalus*, p. 1181
7. BARDET, N., AND M. FERNANDEZ
   A new ichthyosaur from the Upper Jurassic lithographic limestone of Bavaria, p. 503
BARNES, CHRISTOPHER, R., see *1, 102*
BARRÓN, EDUARDO, see *2*
BASSETT, MICHAEL G., see *87*
8. BEAVER, HAROLD H., ALEXANDER J. FABIAN, AND MARK PALATAS
   Summit structures in Mississippian blastoids, p. 247
9. BERMAN, DAVID S
   Origin and early evolution of the amniote occiput, p. 938
10. BODENBENDER, BRIAN E., AND WILLIAM I. AUSICH
    Skeletal crystallography and crinoid calyx architecture, p. 52
11. BOLT, JOHN R., AND SANKAR CHATTERJEE
    A new temnospondyl amphibian from the Late Triassic of Texas, p. 670
BOUCOT, A. J., see *6*
Boyko, Christopher B., see *72*
12. BREZINSKI, DAVID K.
    Lower Mississippian trilobites from southern New Mexico, p. 1043
13. BROCHU, CHRISTOPHER B.
    Borealosuchus (Crocodylia) from the Paleogene of Big Bend National Park, Texas, p. 181
BUATOIS, LUIS A., see *50*
BUITRON-SANCHEZ, B. E., see *21*
BURNHAM, R. J., see *69*
CALDWELL, MICHAEL W., see *45*
CAMPBELL, D. C., see *69*
CARLSON, DAVID T., see *83*
CHATTERJEE, SANKAR, see *11*
CHERNS, LESLEY, see *87*
CHOI, DUCK K., see *39*
14. COOKE, B. N.
    Cranial remains of a new species of balbarine kangaroo (Marsupalia: Macropodoidea) from the Oligo-Miocene freshwater limestone deposits of Riversleigh World Heritage Area, northern Australia, p. 317
CORONA, RODOLFO, see *63*
CORRAL, J. CARMELO, see *2*
15. CROSBY, KIRSTEN AND MICHAEL ARCHER
    Durudawirines, a new group of phalangeroid marsupials from the Miocene of Riversleigh, northwestern Queensland, p. 327
DAAMS, R., see *62*
16. DAESCHLER, EDWARD B.
    Early tetrapod jaws from the Late Devonian of Pennsylvania, USA, p. 301
DAY, JED, see *49*

DINELEY, DAVID L., see *20*
DONOGHUE, PHILIP C. J., see *65*
17. DONOVAN, STEPHAN K. AND DEBORAH-ANN C. ROWE
Spatangoid echinoids from the Eocene of Jamaica, p. 654
18. DUMONT, E. R., S. G. STRAIT, AND A. R. FRISCIA
Abderitid marsupials from the Miocene of Patagonia: An assesment of form, function, and evolution, p. 1161
19. ELIAS, ROBERT J. AND GRAHAM A. YOUNG
Enigmatic fossil encrusting an Upper Ordovician rocky shore on Hudson Bay, Canada, is a coral, p. 179
ELIAS, ROBERT J., see *19, 44*
20. ELLIOTT, DAVID K., DAVID L. DINELEY, AND HEIDEMARIE G. JOHNSON
A vertebrate fauna from the Middle Devonian Yahatinda Formation of southwestern Canada, p. 123
ERWIN, D. H., see *57*
21. ESQUIVEL-MACIAS, C., WILLIAM I. AUSICH, B. E. BUITRON-SANNCHEZ, AND A. FLORES DE DIOS
Pennsylvanian and Mississippian pluricolumnal assemblages (class Crinoidea) from southern Mexico and new occurrences of a column with a tetralobate lumen, p. 1187
22. ETHINGTON, R. L., OLIVER LEHNERT, AND J. E. REPETSKI
Stiptognathus new genus (Conodonta: Ibexian, Lower Ordovician) and the apparatus of *Stiptognathus borealis* (Repetski, 1982), p. 92
FABIAN, ALEXANDER J., see *8*
FEDO, CHRISTOPHER M., see *28*
FELDMANN, R. M., see *69, 73, 74*
FERNANDEZ, M., see *7*
FLORES DE DIOS, A., see *21*
FRISCIA, A. R., see *18*
GAFFNEY, E. S., see *69*
GARBISCH, JON, see *84*
GHILARDI, RENATO P., see *42*
23. GILMOUR, ERNEST H. AND EDWARD M. SNYDER
Bryozoa of the Mission argillite (Permian), northeastern Washington, p. 545
24. GOEDERT, JAMES L., JÖRN PECKMAN, AND JOACHIM REITNER
Worm tubes in an allochthonous cold-seep carbonate from Lower Oligocene rocks of western Washington, p. 992
GOLDSTEIN, ALAN, see *4*
GRIMALT, JOAN, see *2*
25. GROVES, JOHN R. AND MERRELL A. MILLER
Donation of Amoco fossil collections, p. 1196
GUNDERSON, GERALD O., see *35*
26. HAASL, D. M.
Phylogenetic relationships among nassariid gastropods, p. 839
27. HAGADORN, JAMES W. AND BEN WAGGONER
Ediacaran fossils from the southwestern Great Basin, United States, p. 349
28. HAGADORN, JAMES W., CHRISTOPHER M. FEDO, AND BEN M. WAGGONER
Early Cambrian Ediacaran-type fossils from California, p. 731
HAN, JIAN, see *104*
29. HANGER, R. A., R. D. HOARE, AND E. E. STRONG
Permian Polyplacophora, Rostroconchia, and Problematica from Oregon, p. 192
HANGER, REX A., see *29, 100*
Hannibal, Joseph T., see *55*
30. HEAD, MARTIN J.
Geonettia waltonensis, a new goniodomacean dinoflagellate from the Pliocene of the north Atlantic region, and its evolutionary implications, p. 812
31. HOARE, RICHARD D.
New Permian Polyplacophora (Mollusca) from Malaysia, p. 571
32. HOARE, R. D. AND R. H. MAPES
New data on the genus *Diadeloplax* Hoare and Mapes, 1995, p. 976
33. HOARE, R. D. AND NORA SABATTINI
Lower Permian Polyplacophora (Mollusca) from Argentina, p. 189
HOARE, R. D, see *29, 31, 32, 33*
34. HOLMES, ROBERT B. AND HANS-DIETER SUES
A partial skeleton of the basal mosasaur *Halisaurus platyspondylus* from the Severn Formation (Upper Cretaceous: Maastrichtian) of Maryland, p. 309
35. HUGHES, NIGEL C., GERALD O. GUNDERSON, AND MICHAEL J. WEEDON
Late Cambrian conulariids from Wisconsin and Minnesota, p. 828
IGO, HISAYOSHI, see *70*
36. JIN, JISUO AND RENBIN ZHAN
Evolution of the late Ordovician orthid brachiopod *Gnamptorhynchos* Jin, 1989, from *Platystrophia* King, 1850 in North America, p. 983
JOHNSON, HEIDEMARIE G., see *20*
37. JOYCE, WALTER G.
The first complete skeleton of *Solnhofia parsoni* (Cryptodira, Eurysternidae) from the Upper Jurassic of Germany and its taxonomic implications, p. 684
KAJIWARA, YOSHIMICHI, see *70*

KAY, R. F., see *69*
38. KENNEDY, W. J. AND G. LUNN
Upper Campanian (Cretaceous) ammonites from the Shinarish Formation, Djebel Sinjar, northwest Iraq, p. 464
39. KIM, DONG HEE AND DUCK K. CHOI
Jujuyaspis and associated trilobites from the Mungok Formation (Lower Ordovician), Yongwol, Korea, p. 1031
40. KNAPPERTSBUSCH, MICHAEL
Morphologic evolution of the coccolithophoid *Calcidiscus leptoporus* from the Early Miocene to Recent, p. 712
KNOLL, ANDREW H., see *98*
41. KOREN', TATJANA N. AND MICHAEL J. MELCHIN
Lowermost Silurian graptolites from the Kurama Range, eastern Uzbekistan, p. 1093
KOREN', TATJANA N., see *41, 68*
KORN, DIETER, see *64*
42. KOWALEWSKI, MICHAL, MARCELLO G. SIMÕES, FERNANDA F. TORELLO, L. H. C. MELLO, AND RENATO P. GHILARDI
Drill holes in shells of Permian benthic invertebrates, p. 532
KULLMANN, JURGEN, see *64*
LANDING, ED, see *95*
43. LEBOLD, JOSEPH G.
Quantitative analysis of epizoans on Silurian stromatoporoids within the Brassfield Formation, p. 394
44. LEE, DONG-JIN AND ROBERT J. ELIAS
Paleobiologic and evolutionary significance of corallite increase and associated features in *Saffordophyllum newcombae* (Tabulata, Late Ordovician, southern Manitoba), p. 404
45. LEE, MICHAEL Y. AND MICHAEL W. CALDWELL
Adriosaurus and the affinities of mosasaurs, dolichosaurs, and snakes, p. 915
LEE, M. S. Y., see *45, 78*
46. LEFEBVRE, BERTRAND
A new mitrate (Echinodermata, Stylophora) from the Tremodoc of Shropshire (England) and the origin of the Mitrocystitida, p. 890
LEHNERT, OLIVER, see *22*
47. LESLIE, STEPHEN A.
Mohawkian (Upper Ordovician) conodonts of eastern North america and Baltoscandia, p. 1122
LEWIS, MARGARET E., see *94*
48. LI, YOU XING
Famennian tentaculitids of China, p. 969
LIU, LU-JUN, see *101*
LÖFGREN, ANITA, see *90*
LÓPEZ, JORDI F., see *2*
LÓPEZ, RAFAEL, see *2*
LOPEZ-MARTINEZ, P., N., see *62*
LOZSAN, R., see *69*
LUDVIGSEN, ROLF, see *96*
LUNN, G., see *38*
49. MA, XUEPING AND JED DAY
Revision of *Tenticospirifer* Tien, 1938, and similar spiriferid brachiopod genera from the Late Devonian (Frasnian) of Eurasia, North America, and Australia, p. 444
50. MANGANO, M. GABRIELA, LUIS A. BUATOIS, CHRISTOPHER G. MAPLES, AND RONALD R. WEST
A new ichnospecies of *Nereites* from Carboniferous tidal-flat facies of eastern Kansas, USA: Implication for the *Nereites—Neonereites* debate, p. 149
MAPES, G., see *101*
MAPES, R. H., see *32, 57,*
MAPLES, CHRISTOPHER G., see *50*
MARTÍNEZ, SERGIO, see *53*
MARTÍNEZ-DELCLÒS, XAVIER, see *2*
MCCOLLUM, LINDA B., see *86*
MCKINNEY, FRANK K., see *89*
51. MCROBERTS, CHRISTOPHER A.
A primitive *Halobia* (Bivalvia: Halobioidea) from the Triassic of northeast British Columbia, p. 599
MELCHIN, MICHAEL J., see *41, 68*
MELLO, L. H. C., see *42*
MERRITT, ELIZABETH, see *85*
MEYER, DAVID L., see *85*
MILLER, MERRELL A., see *25*
MITCHELL, CHARLES E., see *99*
52. MOOI, RICH AND DAWN PETERSON
A new species of *Leodia* (Clypeasteroida: Echinoidea) from the Neogene of Venezuela and its importance in the phylogeny of mellitid sand dollars, p. 1083
53. MOOI, RICH, SERGIO MARTÍNEZ, AND SARA G. PARMA
Phylogenetic systematics of Tertiary monophorasterid sand dollars (Clypeasteroida: Echinoidea) from South America, p. 263
MORALES-SOTO, SALVADOR, see *66*
54. MUIRHEAD, JEANETTE

Yaraloidea (Marsupialia, Permelelorphia), a new superfamily of marsupial and a description and analysis of the cranium of the Miocene *Yarala burchfieldi*, p. 512
NAKORNSRI, NIKORN, see *70*
55. NEAL, MAXWELL LEWIS AND JOSEPH T. HANNIBAL
Paleoecologic and taxonomic implications of *Sphenothallus* and *Sphenothallus*-like specimens from Ohio and areas adjacent to Ohio, p. 369
NI, YU-NAN, see *99*
56. NIKO, SHUJI
Youngest record of tentaculitoids: *Hidagaienites* new genus from near the Carboniferous-Permian boundary in central Japan, p. 381
57. NÜTZEL, A., D. H. ERWIN, AND R. H. MAPES
Identity and phylogeny of the Late Paleozoic Subulitoidea (Gastropoda), p. 575
ORTUÑO, VICENTE, see *2*
58. OVER, D. JEFFREY AND MEREDITH K. RHODES
Conodonts from the Upper Olentangy Shale (Upper Devonian, central Ohio) and stratigraphy across the Frasnian-Famennian Boundary, p. 101
PALATAS, MARK, see *8*
PARMA, SARA G., see *53*
59. PARSLEY, RONALD L.
Morphological and paleoecological analysis of the Ordovician ankyroid *Lagynocystis* (Stylophora: Echinodermata), p. 254
PECKMAN, JÖRN, see *24*
60. PEGEL, TATYANA V.
Evolution of trilobite biofacies in Cambrian basins of the Siberian Platform, p. 1000
61. PELAEZ-CAMPOMANES, PABLO
Mammalian faunas from the Paleogene of the Sierra Palomera (Teruel, Spain), p. 336
62. PELAEZ-CAMPOMANES, P., N. LOPEZ-MARTINEZ, M. A. ALVAREZ-SIERRA, AND R. DAAMS
The earliest mammal of the European Paleocene: The multituberculate *Hainina*, p. 701
PEÑALVER, ENRIQUE, see *2*
PERFETTA, PATRICK J., see *81*
63. PERRILLIAT, MARIA DEL CARMEN, FRANCISCO J. VEGA, AND RODOLFO CORONA
Early Maastrichtian mollusca from the Mexcala Formation of the state of Guerrero, southern Mexico, p. 7
64. PETERSEN, MORRIS S., DIETER KORN, AND JURGEN KULLMANN
The Early Mississippian (Osagean) ammonoid *Dzhaprakoceras* Cephalopoda from Utah, p. 853
PETERSON, DAWN, see *52*
POJETA, JOHN, see *66*
POPE, JOHN PAUL, see *84*
PRATT, BRIAN R., see *103*
PURDY, R., see *69*
65. PURNELL, MARK A., PHILIP C. J. DONOGHUE, AND RICHARD J. ALDRIDGE
Orientation and anatomical notation in conodonts, p. 113
PURNELL, MARK, see *5*
QIAO, XIN-DONG, see *99*
66. QUIROZ-BARROSO, S. A., JOHN POJETA, FRANCISCO SOUR-TOVAR, AND SALVADOR MORALES-SOTO
Pseudomulceodens: a Mississippian rostroconch from Mexico, p. 1184
QUIROZ-BARROSO, S. A., see *66, 77*
REITNER, JOACHIM, see *24*
REPETSKI, J. E., see *22*
67. REYNOSO, V. H.
An unusual aquatic sphenodontian (Reptilia: Diapsida) from the Tlayua Formation (Albian), Central Mexico, p. 133
RHODES, MEREDITH K., see *58*
ROTHWELL, GAR W., see *101*
ROWE, DEBORAH-ANN C., see *17*
RUBEL, MADIS, see *93*
68. RUSSEL, JENNIFER C., MICHAEL J. MELCHIN, AND TATJANA N. KOREN'
Development, taxonomy, and phylogenetic relationships of species of Paraclimacograptus (Graptoloidea) from the Canadian Arctic and the Southern Urals of Russia, p. 84
SABATTINI, NORA, see *33*
69. SANCHEZ-VILLAGRA, M. R., R. J. BURNHAM, D. C. CAMPBELL, R. M. FELDMANN, E. S. GAFFNEY, R. F. KAY, R. LOZSAN, R. PURDY, AND J. G. M. THEWISSEN
A new near-shore marine fauna and flora from the Early Neogene of northwestern Venezuela, p. 957
SARDSUD, APSORN, see *70*
70. SASHIDA, KATSUO, HISAYOSHI IGO, SHUKO ADACHI, KATSUMI UENO, YOSHIMICHI KAJIWARA, NIKORN NAKORNSRI, AND APSORN SARDSUD
Late Permian to Middle Triassic radiolarian faunas from northern Thailand, p. 789
71. SATO, TAMAKI AND GLENN W. STORRS
An early polycotylid plesiosaur (Reptilia: Sauropterygia) from the Cretaceous of Hokkaido, Japan, p. 907
72. SCHWEITZER, CARRIE E. AND CHRISTOPHER B. BOYKO
First report of the genus *Lophomastix* Benedict, 1904 (Crustacea: Decapoda: Albuneidae) in the fossil record and a repraisal of the status of *Blepharipoda brucei* Rathbun, 1926, p. 631
73. SCHWEITZER, CARRIE E. AND RODNEY M. FELDMANN
New species of calappid crabs from western North America and reconsideration of the Calappidae sensu lato, p. 230
74. SCHWEITZER, CARRIE E. AND RODNEY M. FELDMANN

New fossil Portunids from Washington, USA, and Argentina, and a re-evaluation of generic and family relationships within the Portunoidea Rafinesque, 1815 (Decapoda: Brachyura), p. 636

75. SHEAR, WILLIAM A.
Gigantocharinus szatmaryi, a new trigonotarbid arachnid from the Late Devonian of North america (Chelicerata, Arachnida, Trigonotarbida), p. 25

SHU, DEGAN, see *104*

SIMÕES, MARCELLO G., see *42*

76. SMITH, ANDREW B.
Stratigraphy in phylogeny reconstruction, p. 763

SNYDER, EDWARD M., see *23*

SORHANNUS, ULF, see *91, 92*

77. SOUR-TOVAR, FRANCISCO, SARA A. QUIROZ-BARROSO, AND SHELTON P. APPLEGATE
Presence of *Helicoprion* (Chondrichthyes, Elasmobranchii) in the Permian Patlanoaya Formation, Puebla, Mexico, p. 363

SOUR-TOVAR, FRANCISCO, see *66, 77*

78. SPENSER, P. S. AND S. M. Y. LEE
A juvenile *Elginia* and early growth in pareiasaurs, p. 1191

79. STILLER, FRANK
Two early millercrinids and an unusual crinoid of uncertain systematic position from the lower Upper Anisian (Middle Triassic) of Qingyan, southwestern China, p. 32

80. STITT, JAMES H.
Additional information on lowest Ordovician trilobites from the uppermost Deadwood Formation, Black Hills and Bear Lodge Mountains, South Dakota and Wyoming, p. 360

81. STITT, JAMES H., AND PATRICK J. PERFETTA
Trilobites, biostratigraphy, and lithostratigraphy of the *Crepicephalus* and *Aphelaspis* zones, lower Deadwood Formation (Marjuman and Steptoean stages, Upper Cambrian), Black Hills, South Dakota, p. 199

STORRS, GLENN W., see *71, 85*

STRAIT, S. G., see *18*

STRONG, E. E., see *29, 100*

SUES, HANS-DIETER, see *34*

82. SUMRALL, COLIN D.
The biological implications of an edrioasteroid attached to a pleurocystitid rhombiferan, p. 67

83. SUMRALL, COLIN D., AND DAVID T. CARLSON
Suture modification by pectinirhomb growth in *Lepadocystis decorus,* a new species of callocystitid glyptocystitid rhombiferian (echinodermata) from Illinois, p. 487

84. SUMRALL, COLIN D., JON GARBISCH, AND JOHN PAUL POPE
The systematics of postibullinid edrioasteroids, p. 72

85. SUMRALL, COLIN D., PAULA T. WORK, DAVID L. MEYER, GLENN W. STORRS, AND ELIZABETH MERRITT
Notice of transfer of the University of Cincinnati paleontology collections to Cincinnati Museum Center, p. 1198

86. SUNDBERG, FREDERICK A. AND LINDA B. MCCOLLUM
Ptychopariid trilobites of the Lower-Middle Cambrian boundary interval, Pioche shale, southeastern Nevada, p. 604

87. SUTTON, MARK, MICHAEL G. BASSETT, AND LESLEY CHERNS
The type species of *Lingulella* (Cambrian Brachiopoda), p. 42

88. SWEET, WALTER C.
Conodonts and biostratigraphy of Upper Ordovician strata along a shelf to basin transect in central Nevada, p. 1148

89. TAYLOR, PAUL D. AND FRANK K. MCKINNEY
Reinterpretation of *Stictostega* Shaw, 1967, an Upper Cretaceous cheilostome bryozoan from Arkansas, p. 1

THEWISSEN, J. G. M., see *69*

90. TOLMACHEVA, TATIANA AND ANITA LÖFGREN
Morphology and Paleogeography of the Ordovician conodont *Paracordylodus gracilis* Lindström, 1955: comparison of two populations, p. 1114

TORELLO, FERNANDA F., see *42*

TRINCÃO, PAULO R., see *2*

91. TSHUDY, DALE AND ULF SORHANNUS
Jagtia kunradensis, a new genus and species of clawed lobster (Decapoda: Nephropidae) from the Upper Cretaceous (Upper Maastrichtian) Maastricht Formation, The Netherlands, p. 224

92. TSHUDY, DALE AND ULF SORHANNUS
Pectinate claws in decapod crustaceans: Convergence in four lineages, p. 474

UENO, KATSUMI, see *70*

VEGA, FRANCISCO J., see *63*

93. VINN, OLEV AND MADIS RUBEL
The spondylium and related structures in the clitambonitidine brachiopods, p. 439

WAGGONER, BEN, see *27, 28*

WEEDON, MICHAEL J., see *35*

94. WERDERLIN, LARS AND MARGARET E. LEWIS
Carnivora from the South Turkwel hominid site, northern Kenya, p. 1173

WEST, RONALD R., see *50*

95. WESTROP, STEPHEN R. AND ED LANDING
Lower Cambrian (Branchian) trilobites and biostratigraphy of the Hanford Brook Formation, southern New Brunswick, p. 858

96. WESTROP, STEPHEN R. AND ROLF LUDVIGSEN

The Late Cambrian (Marjuman) trilobite genus *Hysteropleura* Raymond from the Cow Head Group, western Newfoundland, p. 1020

97. WHITTINGTON, HARRY B.
Stygina, Eobronteus (Ordovician Styginidae, Trilobita): morphology, classification and affinities of Illaenidae, p. 879

WORK, PAULA T., see *85*

98. XIAO, SHUHAI AND ANDREW H. KNOLL
Phosphatized animal embryos from the Neoproterozoic Doushantuo Formation at Weng'an, Guizhou, South China, p. 767

99. XU, CHEN, NI YU-NAN, CHARLES E. MITCHELL, QIAO XIN-DONG, AND ZHAN SHI-GAO
Graptolites from the Qilang and Yingan formations (Caradoc, Ordovician) of Kalpin, western Tarim, Xinjiang, China, p. 282

100. YANCEY, THOMAS E., ELLEN E. STRONG, AND REX A. HANGER
The genus *Vesperispira* (Gastropoda: Pleurotomarioidea) from the Permian of two displaced terranes, western United States, p. 741

101. YAO, ZHAO-QI, LU-JUN LIU, GAR W. ROTHWELL, AND GENE MAPES
Szecladia new genus, a late Permian conifer with multiveined leaves from South China, p. 524

YATES, RON, see *4*

YOUNG, GRAHAM A., see *19*

YUANLIN, SUN, see *6*

ZHAN, RENBIN, see *36*

ZHAN, SHI-GAO, see *99*

102. ZHANG, SHUNXIN AND CHRISTOPHER R. BARNES
Anticostiodus, a new multielement conodont genus from the Lower Silurian, Anticosti Island, Quebec, p. 662

103. ZHANG, XI-GUANG AND BRIAN R. PRATT
A varied Middle Ordovician sponge spicule assemblage from western Newfoundland, p. 386

104. ZHANG, XINGLIANG, JIAN HAN, AND DEGAN SHU
A new arthropod *Pygmaclypeatus daziensis* from the Early Cambrian Chengjiang Lagerstatte, south China, p. 979

SUBJECT INDEX

Abrotocrinus debrae n. sp., Crinoid, *4*
Abrotocrinus springeri n. sp., Crinoid, *4*
Adriosaurus: affinites, *45*
Aguayoaster schickleri n. sp., Echinoid, *17*
Aegirosaurus n. gen., Ichthyosaur, *7*
Alternifenestella vagrantia n. sp., Bryozoa, *23*
Amaurellina guerrera n. sp. Gastropoda, *63*
Ameropiltonia perplexa n. sp., Trilobite, *12*
Ammonite: Cretaceous, Iraq, 38; Mississippian, Utah, *64*
Amniote: evolution, *9*
Amphibian: Triassic, Texas, *11*
Amplaster ellipticus n. sp., Echinoidea, *53*
Amplexograptus maxwelli spinosus n. ssp., Graptolite, *99*
Ankylosphenodon n. gen., Reptilia, *67*
Ankylosphenodon pachyostosus n. sp., Reptilia, *67*
Anticostiodus boltoni n. sp., Conodont, *102*
Anticostiodus fahraeusi n. sp., Conodont, *102*
Anticostiodus n. gen., Conodont, 102
Arachnida: Devonian, North America, *75*
Arceodomus sphairikos n. sp. Rostroconch, *29*
Arcochiton soccus n. sp. Polyplacophora, *29*
Argentina: Decapoda, *74*; Permian, Mollusca, *33*
Arizona: Triassic, mite, *3*
Arkansas: Cretaceous, Bryozoa, *89*
Arthropod: Cambrian, China, *104*
Asketochiton n. gen. Polyplacophora, *33*
Asketochiton chubutensis n. sp. Polyplacophora, *33*
Australia: Devonian, Brachiopod, *49*; Miocene, Marsupialia, *15*; Oligo-Miocene, Marsupialia, *14*
Baccaconularia meyeri n. sp., Conulariid, *35*
Baccaconularia n. gen., Conulariid, *35*
Baccaconularia robinsoni n. sp., Conulariid, *35*
Balbaroo fangaroo n. sp., Marsupialia, *14*
Baltoscandia: Ordovician, Conodont, *47*
Bangtoupocrinidae n. fam. Crinoid, *79*
Bangtoupocrininae n. subfam., Crinoid, *79*
Bangtoupocrinus n. gen. Crinoid, *79*
Bangtoupocrinus kokeni n. sp. Crinoid, *79*
Bavaria: Jurassic, Ichthyosaur, *7*
Berabichia milleri n. sp., Trilobite, *95*
Bivalve: Triassic, Canada, *51*
Blastoid: Mississippian, *8*
Borealosuchus sp. Crocodylia, *13*
Brachiopod: Cambrian, *87*; Devonian, Eurasia, North America, Australia, *49*; Ordovician, North America, *36*; structures, *93*
Brachymetopus indianwellsensis n. sp., Trilobite, *12*
Bransatoglis attenuatus n. sp., Rodent, *61*
Bryozoa: Cretaceous, Arkansas, *89*; Permian, Washington, *23*
Calappidae: North America, *73*
California: Cambrian, Ediacaran, *28*
Calliomphalus (Planolateralus) mexcalensis n. sp. Gastropoda, *63*
Cambrian: Arthropod, China, *104*; Brachiopod, *87*; Conulariid, Wisconsin, Minnesota, *35*; Ediacaran, California, *28*; Trilobite, Nevada, *86*; Trilobite, New Brunswick, *95*; Trilobite, Newfoundland, *96*; Trilobite, Siberia, *60*; Trilobite, South Dakota, *81*
Camptocrinus nudus *n. sp., Crinoid, 4*
Canada: Conodont, Silurian, *102*; Devonian, Vertebrate, *20*; Ordovician, coral, *19*; Ordovician, Tabulate, *44*; Triassic, Bivalve, *51*
Canadian Arctic: Graptolite, *68*
Canis n. sp. A, Carnivore, *94*
Carboniferous: Kansas, Ichnospecies, *50*; Tentaculitoid, Japan, *56*
Carnivore: Kenya, *94*
Caveasphaera costata n. sp., Embryo, *98*
Caveasphaera n. gen. Embryo, *98*
Cenosphaera igoi n. sp., Radiolarian, *70*
Cenosphaera? rugosa n. sp., Radiolarian, 70
China: Cambrian, Arthropod, *104*; Neoproterozoic, Embryo, *98*; Ordovician, Graptolite, *99*; Permian, Conifer, *101*; Tentaculitid, Famennian, *48*; Triassic, Crinoid, *79*
Chondrichthyes: Permian, Mexico, *77*
Coccolithophorid: Evolution, Miocene, Recent, *40*
Coeloclemis urhausenii n. sp., Bryozoa, *23*
Conifer: Permian, China, *101*
Conodonta: Devonian, Ohio, *58*; *65*; Ordovician, *22*; Ordovician, *90*; Ordovician, Nevada, *88*; Ordovician, North America, Baltoscandia, *47*; Ordovician, Punctuated equilibrium, *1*; Osteichtyes, *Ubinates, Aethotaxis, 5*; Silurian, Canada, *102*
Conulariid: Cambrian, Wisconsin, Minnesota, *35*
Coral: Ordovician, Canada, *19*
Corumbella n. sp. A, Ediacaran, *27*
Cretaceous: Ammonite, Iraq, *38*; Bryozoa, Arkansas, *89*; Decapoda, Netherlands, *91*; Gastropoda, Mexico, *63*; Insecta, Spain, *2*; Mosasaur, Maryland, *34*; Plesiosaur, Japan, *71*; Reptilia, Mexico, *67*
Crinoid: Mississippian, Kentucky, *4*; Pennsylvanian, Mississippian, Mexico, *21*; skeletal crystalography, *10*; Triassic, China, *79*
Crocodylia: Paleocene, Texas, *19*
Cryptodira: Jurassic, Germany, *37*
Decapoda: Cretaceous, Netherlands, *91*; Eocene, *72*; pectinate claws, *92*; Washington, Argentina, *74*
Densignathus n. gen., Tetrapod, *16*
Densignathus rowei n. sp., Tetrapod, *16*
Devonian: Arachnida, North America, *75*; Brachiopod, Eurasia, North America, Australia, *49*; Conodonta, Ohio, *58*; Tetrapod, Pennsylvania, *16*; Vertebrate, Canada, *20*
Diadeloplax apiculatus n. sp. Multiplacophora, *29*
Diadeloplax, Hoare and Mapes, 1995, new data, *32*
Dinoflagellate: Pliocene, North Atlantic, *30*
Donation of Amoco Collection, *25*
Drill holes: Permian, Invertebrates, *42*
Drilluta gloriae n. sp. Gastropoda, *63*
Durudawiri n. gen., Marsupialia, *15*
Durudawiri inusitatus n. sp., Marsupialia, *15*
Durudawirinae n. subfam., Marsupialia, *15*
Dzhaprakoceras gordoni n. sp., Ammonite, *64*
Echinodermata: Ordovician, Stylophora, *59*; Tremadoc, England, *46*
Echinoidea: Jamaica, Eocene, *17*; Tertiary, South America, *53*
Ediacaran: Cambrian, California, *28*; Great Basin, *27*
Edrioasteroid: *82*; *84*
Embryo: China, Neoproterozoic, *98*
England: Tremadoc, Echinodermata, *46*
Eocene: Decapoda, *72*; Echinoidea, Jamaica, *17*
Eokochaspis delamarensis n. sp., Trilobite, *86*
Eokochaspis longspina n. sp., Trilobite, *86*
Eokochaspis metalaspis n. sp., Trilobite, *86*
Eokochaspis n. gen., Trilobite, 86
Eokochaspis nodosa n. sp., Trilobite, *86*
Epizoan: Silurian, Ohio, *43*
Eriosachila rossi n. sp., Calappidae, 73
Eurasia: Devonian, Brachiopod, *49*
Europe: Paleocene, Multituberculate, *62*
Evolution: Amniote occiput, *9*; Coccolithophorid, Miocene, Recent, *40*
Famennian: Tentaculitid, China, *48*
Fistuliramus pacificus n. sp., Bryozoa, *23*
Gastropoda: Cretaceous, Mexico, *63*; Paleozoic, *57*; Permian, United States, *100*; Phylogenetic relationships, *26*
Geonettia waltonensis n. sp., Dinoflagellate, *30*
Germany: Jurassic, Cryptodira, *37*
Gigantocharinus szatmaryi n. sp. Arachnida, *75*
Glaphyraspis newtoni n. sp., Trilobite, *81*
"Glyptograptus" jerini n. sp., Graptolite, *41*
"Glyptograptus" ugurensis n. sp., Graptolite, *41*
Graptolite: Ordovician, China, *99*; Russia, Canadian Arctic, *68*; Silurian, Uzbekistan, *41*
Great Basin: Ediacaran, *27*
Griffithidella caballeroensis n. sp., Trilobite, *12*
Gryphochiton planoplata n. sp. Polyplacophora, *29*
Hadrochiton n. gen., Polyplacophora, *31*

Hadrochiton pileus n. sp. Polyplacophora, *31*
Hainina pyrenaica n. sp., Multituberculate, *62*
Halobia daonellaformis n. sp., Bivalve, *51*
Helaspis finis n. sp., Vertebrate, *20*
Helaspis n. gen., Vertebrate, *20*
Hesslerides arcentensis n. sp., Trilobite, *12*
Hesslerides n. gen., Trilobite, *12*
Hidagaienites arcuatus n. sp. Tentaculitoid, *56*
Hidagaienites n. gen. Tentaculitoid, *56*
Homeochiton n. gen. Polyplacophora, *29*
Homeochiton triangulus n. sp. Polyplacophora, *29*
Hysteropleura (Verditerrina) adraini n. sp., Trilobite, *96*
Hysteropleura (Verditerrina) edgecombei n. sp., Trilobite, *96*
Hysteropleura (Verditerrina) ramskoldi n. sp., Trilobite, *96*
Ichthyosaur: Jurassic, Bavaria, *7*
Illinois: Ordovician, Rhombiferan, *83*
Insecta: Cretaceous, Spain, *2*
Invertebrates: Permian, Drill holes, *42*
Iraq: Cretaceous, Ammonite, *38*
Jagita n. gen., Decapoda, *91*
Jagita kunradensis n. sp., Decaposa, *91*
Jamaica: Eocene, Echinoidea, *17*
Japan: Cretaceous, Plesiosaur, *71*
Jurassic: Cryptodira, Germany, *37*; Ichthyosaur, Bavaria, *7*
Kansas: Carboniferous, Ichnospecies, *50*
Kentucky: Mississippian, Crinoid, *4*
Kenya: Carnivore, *94*
Kochina? Walcotti n. sp., Trilobite, *86*
Kollarcephalus granatai n. sp., Trilobite, *12*
Kollarcephalus n. gen., Trilobite, *12*
Korea: Ordovician, Trilobite, *39*
Kraterochiton magnificus n. sp. Polyplacophora, *31*
Kraterochiton n. gen., Polyplacophora, *31*
Leodia divinata n. sp., Sand dollar, *52*
Lepadocystis decorus n. sp., Rhombiferan, *83*
Lingulella davisii M' Coy, 1851, Brachiopod, *87*
Lophomastix antiqua n. sp., Decapoda, *72*
Mackinneyella stylettia n. sp., Bryozoa, *23*
Malaysia: Permian, Polyplacophora, *31*
Mammal: Paleogene, Spain, *61*
Marine fauna: Neogene, Venezuela, *69*
Marsupialia: Miocene, *54*; Miocene, Australia, *15*; Miocene, Patagonia, *18*; Oligo-Miocene, Australia, *14*
Maryland: Cretaceous, Mosasaur, *34*
Meekoporella inflecta n. sp., Bryozoa, *23*
Megantereon ekidoit n. sp., Carnivore, *94*
Megasphaera ornata n. sp., Embryo, *98*
Megokkos n. gen., Decapoda, *74*
Mespilocrinus myllos n. sp., Crinoid, *4*
Mexicella antelopea n. sp., Trilobite, *86*
Mexicella robusta n. sp., Trilobite, *86*
Mexico: Cretaceous, Gastropoda, *63*; Cretaceous, Reptilia, *67*; Mississippian, Rostroconch, *66*; Pennsylvanian, Mississippian, Crinoid, *21*
Minnesota: Cambrian, Conulariid, *35*
Miocene: Coccolithophorid, Evolution, *40*; Marsupialia, *54*; Marsupialia, Australia, *15*; Marsupialia, Patagonia, *18*; Permian, Chondrichthyes, *77*
Miralininae n. subfam., Marsupialia, *15*
Mississippian: Ammonite, Utah, *64*; Blastoid, *8*; Crinoid, Kentucky, *4*; Crinoid, Mexico, *21*; Rostroconch, Mexico, *66*; Trilobite, New Mexico, *12*
Mite: Triassic, Arizona, *3*
Mollusca: Cephalopod, Ammonite, Cretaceous, Iraq, *38*; Permian, Argentina, *33*; Permian, Oregon, *29*;
Mosasaur: Cretaceous, Maryland, *34*
Multituberculate: Paleocene, Europe, *62*
Mursia aspina n. sp., Calappidae, *73*
Namuropyge newmexicoensis n. sp., Trilobite, *12*
Neoeridotrypella missionensis n. sp., Bryozoa, *23*
Neogene: Sand dollar, Venezuela, *52*; Venezuela, Marine fauna, *69*
Neoproterozoic: China, Embryo, *98*
Nereites imbricata n. sp. Ichnospecies, *50*
Netherlands: Cretaceous, Decapoda, *91*
Nevada: Cambrian, Trilobite, *86*; Ordovician, Conodont, *88*
New Brunswick: Cambrian, Trilobite, *95*
Newfoundland: Cambrian, Trilobite, *96*; Ordovician, Sponge, *103*
New Mexico: Mississippian, Trilobite, *12*
Nododelphinula diminuta n. sp. Gastropoda, *63*
Normalograptus larini n. sp., Graptolite, *41*
Normalograptus skeliphrus n. sp., Graptolite, *41*
North America: Calappidae, *73*; Devonian, Arachnid, *75*; Devonian, Brachiopod, *49*; Ordovician, Brachiopod, *36*; Ordovician, Conodont, *47*
North Atlantic: Pliocene, Dinoflagellate, *30*
Nostoceras (Nostoceras) ellipticum n. sp., Ammonite, *38*
Nunnaspis n. gen., Trilobite, *12*
Nunnaspis stitti n. sp., Trilobite, *12*
Ohio, Devonian, Conodonta, *58*; Silurian, Epizoan, *43*; *Sphenothallus, 55*
Oligocene: worm tubes, Washington, *24*
Oligo-Miocene: Marsupialia, Australia, *14*
Ordovician: Brachiopod, North America, *36*; Conodonta, *22*; Conodonta, Punctuated equilibrium, *1*; coral, Canada, *19*; Conodont, *90*; Conodont, Nevada, *88*; Conodont, North America, Baltoscandia, *47*; Echinodermata, Stylophora, *59*; Graptolite, China, *99*; Rhombiferan, Illinois, *83*; Sponge, Newfoundland, *103*; Tabulate, Canada, *44*; Trilobite, *97*; Trilobite, Korea, *39*; Trilobite, South Dakota, Wyoming, *80*
Oregon: Permian, Mollusca, *29*
Osteichtyes: Conodont, *Ubinates, Aethotaxis, 5*
Paleocene: Europe, Multituberculate, *62*; Reptilia, Crocodylia, Texas, *13*
Paleogene: Mammal, Spain, *61*
Paleozoic: Gastropod, *57*
Pamirella oculus n. sp., Bryozoa, *23*
Paraclimacograptus, Graptolite, Russia, *68*; *"Paraclimacograptus" kiliana kuramaensis* n. sp., Graptolite, *41*
Paradichocrinus ramus n. sp., Crinoid, *4*
Parapostibulla murphyi n. sp. Edrioasteroid, *84*
Parapostibulla n. gen., Edrioasteroid, *84*
Parascytalocrinus pentagonus n. sp., Crinoid, *4*
Patagonia: Miocene, Marsupialia, *18*
Pectinate claws: Decapoda, *92*
Pennsylvania: Devonian, Tetrapod, *16*
Pennsylvanian: Crinoid, Mexico, *21*
Permian: Bryozoa, Washington, *23*; Chondrichthyes, Mexico, *77*; Conifer, China, *101*; Drill holes, Invertebrates, *42*; Gastropod, United States, *100*; Mollusca, Argentina, *33*; Mollusca, Oregon, *29*; Polyplacophora, Malaysia, *31*; Radiolarian, Thailand, *70*; Tentaculitoid, Japan, *56*
Pareiasaur, *78*
Piltonia carlakertisae n. sp., Trilobite, *12*
Pinegopora petita n. sp., Bryozoa, *23*
Phylogeny: Reconstruction, *76*
Plesiosaur: Cretaceous, Japan, *71*
Pliocene: Dinoflagellate, North Atlantic, *30*
Polyplacophora: Permian, Malaysia, *31*
Polypora arbusca n. sp., Bryozoa, *23*
Portunites nodosus n. sp., Decapoda, *74*
Postibulla alabamaensis n. sp., Edrioasteroid, *84*
Postibullinae n. subfam., Edrioasteroid, *84*
Potamides temalacenis n. sp. Gastropoda, *63*
Poteriocrinites horowitzi n. sp., Crinoid, *4*
Pseudobelodina manitoulinensis n. sp., Conodont, *47*
Pseudospongoprunum? chiangdaoensis n. sp., Radiolarian, 70
Ptychopotamides ancestalus n. sp. Gastropoda, *63*
Punctuated equilibrium: Ordovician, Conodont, *1*
Pygmaclypeatus daziensis n. sp., Arthropod, *104*
Pygmaclypeatus n. gen., Arthropod, *104*
Pyknochiton lunatus n. sp. Polyplacophora, *31*
Pyknochiton n. gen., Polyplacophora, *31*

Qingyanocrinidae n. fam., Crinoid, *79*
Radiolarian: Permian, Triassic, Thailand, *70*
Recent: Coccolithophorid, Evolution, *40*
Reptilia: Cretaceous, Mexico, *67*; Crocodylia, Paleocene, Texas, *13*
Rhombiferan: Ordovician, Illinois, *83*
Rhombotrypell kettlensis n. sp., Bryozoa, *23*
Rileymillerus cosgriffi n. sp., Amphibian, *11*
Rileymillerus n. gen., Amphibian, *11*
Rostroconch: Mississippian, Mexico, *66*
Russia: Graptolite, *68*
Saffordophyllum newcombae Flower, 1961, Tabulate, *44*
Sakagamiina easternensis n. sp., Bryozoa, *23*
Sakagamiina n. gen., Bryozoa, 23
Sand dollar: Neogene, Venezuela, *52*
Siberia: Cambrian, Trilobite, *60*
Silesiacrinus parvus n. sp. Crinoid, *79*
Silurian: Graptolite, Uzbekistan, *41*; Ohio, Epizoan, *43*
Solnhofia parsonsi, Cryptodira, *37*
South America: Tertiary, Echinoidea, *53*
South Dakota: Cambrian, Trilobite, *81*; Ordovician, Trilobite, *80*
Spain: Cretaceous, Insecta, *2*; Paleogene, Mammal, *61*
Sphenothallus: Ohio, *55*
Sponge: Ordovician, Newfoundland, *103*
Stictostega durhami Shaw, 1976, *89*
Stiptognathus n. gen. Conodonta, *22*
Stringocephalus, 6
Stylophora: Echinodermata, Ordovician, *59*
Szecladia n. gen., Conifer, *101*
Tabulate: Ordovician, Canada, *44*
Tabulipora colvillensis n. sp., Bryozoa, *23*
Tentaculitid: China, Famennian, *48*
Tentaculitoid: Carboniferous, Permian, Japan, *56*
Tertiary: Echinoidea, South America, *53*
Tetrapod: Devonian, Pennsylvania, *16*
Texas: Paleocene, Reptilia, Crocodylia, *13*; Triassic, Amphibian, *11*
Thailand: Permian, Triassic, Radiolarian, *70*
Triassic: mite, Arizona, *3*
Thigriffides? Alamogordoensis n. sp., Trilobite, *12*
Thigriffides triangula n. sp., Trilobite, *12*
Tlecerina? apsornae n. sp., Radiolarian, *70*
Tremadoc: Echinodermata, England, *46*
Treposciurus manentis n. sp., Rodent, *61*
Triassic: Amphibian, Texas, *11*; Bivalve, Canada, *51*; Crinoid, China, *79*; Radiolarian, Thailand, *70*
Trilobite: Cambrian, Nevada, *86*; Cambrian, New Brunswick, *95*; Cambrian, Newfoundland, *96*; Cambrian, Siberia, *60*; Cambrian, South Dakota, *81*; Mississippian, New Mexico, *12*; Ordovician, *97*; Ordovician, Korea, *39*; Ordovician, South Dakota, Wyoming, *80*
United States: Permian, Gastropod, *100*
Utah: Mississippian, Ammonite, *64*
Uzbekistan: Silurian, Graptolite, *41*
Venezuela: Neogene, Marine fauna *69*; Neogene, Sand dollar, *52*
Vertebrate: Devonian, Canada, *20*
Vesperispira n. gen., Gastropod, *100*
Vesperispira humboldtiana n. sp., Gastropod, *100*
Vizcainocarpus rutai n. sp., Echinodermata, *46*
Washington: Decapoda, *74*; Oligocene, worm tubes, *24*; Permian, Bryozoa, *23*
Wisconsin: Cambrian, Conulariid, *35*
Wjatkella nanea n. sp., Bryozoa, *23*
Worm tubes: Oligocene, Washington, *24*
Worthenocrinus hardinensis n. sp., Crinoid, *4*
Wyoming: Ordovician, Trilobite, *80*
Yaralidae n. fam., Marsupialia, *54*
Yaraloidea n. superfam., Marsupialia, *54*